



DATE: November 8, 1985
TO: Mark Haney
FROM: Cindy Davis *CD*
SUBJECT: 1978030003 -- Will County
Lemont/Land & Lakes

The groundwater monitoring system at Lemont/Land & Lakes consists of seven (7) wells, 2 upgradient and 5 downgradient. Regional groundwater flow is southeast towards the Des Plaines River (See Figure 1). Wells G101 and G102 comprise the upgradient wells with wells G18S, G18D, G19S, G19D and G13D being downgradient. Wells G13D, G18D, G19D and G101 are screened within the top 10 feet of bedrock. The remaining wells are screened in the overlying sand and silt.

Values for the following compounds are higher in upgradient wells than in downgradient wells:

- Ammonia (diss)
- Residue on Evaporation (diss)
- Specific Conductance
- Sulfate (diss)
- Total Organic Carbon
- Boron (diss)
- Manganese (diss)

Chemical analysis forms submitted to the Agency from August 30, 1983 to the present by Gulf Coast Labs showed only one parameter exceeded the General Use Water Standards of Title 35, Ill. Adm. Code, Subtitle C. Two downgradient wells, G18D and G18S, exceeded the standard for Boron (dissolved). It should be noted, however, that the Boron (dissolved) values are fluctuating and do not appear to reflect steady increases.

<u>Well</u>	<u>Date Sampled</u>	<u>Value mg/l</u>	<u>Standard mg/l</u>
G18D	11/29/83	2.7	1.0
	02/01/84	.2	
	05/17/84	1.9	
	01/15/85	.9	
	05/02/85	.088	
G18S	11/29/83	6.6	1.0
	02/01/84	2.4	
	05/17/84	1.9	
	01/15/85	1.9	
	05/02/85	.398	

EPA Region 5 Records Ctr.



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At first glance, the chemical analysis forms indicate that Silver, Mercury, Copper and Zinc values were over the general water standards. However, further investigation revealed the detection limits used by Gulf Coast Labs were higher than general standards. For example, the detection limit used by Gulf Coast Lab for Silver is 0.05 mg/l, but the general standard is 0.005 mg/l. The value <.05 mg/l, although greater than .005 mg/l, does not necessarily mean that the general drinking water standard has been exceeded, but the lab cannot detect Silver, Mercury, Copper and Zinc values down to the upper limit of the general drinking water standards. Public Food Processing Standards are not established for Silver, Mercury, Copper and Zinc.

CSD:tk:2/4/8

cc: Division File

FIGURE 1

